implementing agencies and the States are advised to expedite the progress of works based upon the review.

Effect of global warming

4048. SHRI MAHENDRA MOHAN: Will the Minister of ENVIORNMENT AND FORESTS be pleased to state:

(a) whether Government are aware that country would lose many hectares of land due to global warming by the end of this century;

(b) if so, what stretegy has been formulated by Government to identify the affected areas;

(c) whether Government have prepared any blue-print for the rehabilitation of affected people and evacuate the likely and already affected areas; and

(d) how much land has been lost by our country in the coastal areas due to global warming during this century and what is the rate of rise of sea level right now compared to last decades?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) Yes, Sir.

(b) to (d) The Government is aware of the implications due to projected climate change and the past observations on the mean sea level along the Indian coast show a long-term rising trend of about 1.0 mm/year. The recent data suggests a rising trend of 2.5 mm/year in the sea-level along Indian coastline. Model simulation studies indicate that the oceanic region adjoining the Indian subcontinent is likely to warm at its surface by about 1.5-2 degree Centigrade by the middle of this century and by about 2.3 -3.5 degree Centigrade by the end of the century The corresponding thermal expansion, related sea-level rise is expected to be between 15 cm and 38 cm by the middle of this century and between 46 cm and 59 cm by the end of the century. According to a study conducted by the Ministry of Environment & Forests on the impacts of climate change on various sectors including coastal zones, in the event of one meter sea-level rise, 5764 km^2 of land in coastal areas of India is projected to lose, displacing approximately 7.1 million people along with 4200 km of roads. Further the coastal areas are also vulnerable to projected increase in frequency and

intensity of *extreme* weather events like storm surges and cyclones. In the eastern coast, the vulnerable districts include Jagatsinghpur and Kendrpara in Orissa and Nellore in Andhra Pradesh and Nagapattinam in Tamil Nadu.

The Government appointed an "Expert Committee on Impacts of Climate Change with following Terms of Reference:

(a) To study the impacts of anthropogenic climate change on India.

(b) To identify the measures that we may have to lake in the future in relation to addressing vulnerability to anthropogenic climate change impacts

(c) Any other matter relevant to (a) and (b) above.

Wildlife Protection Policy

4049. SHRI S.M. LALJAN BASHA : Will the Minister of ENVIORNMENT AND FORESTS be pleased to state:

(a) whether it is a fact that wildlife protection policy of Government recognize the need to avoid fragmentation of existing sanctuaries and reserves and other wildlife areas;

(b) what are the guidelines available with Government to ensure that huge irrigation projects do not flood and submerge existing sanctuaries; and

(c) how many dams or irrigation projects which have been cleared in Kamataka, Andhra Pradesh and Maharashtra would involve submersion of at least 1000 acres of sanctuaries in 2005-06 and 2006-07 alongwith the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) The Central Government recognizes the need of enhancement of wildlife habitat and restoring of linkages and corridors between Protected Areas and other reserves avoiding fragmentation of important habitats.

(b) Diversion of forest land for any non-forestry activity including irrigation project require the prior permission of the Central Government under the Forest (Conservation) Act 1080. Further, any diversion of land from a Protected Area would also require the recommendation of the